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09/024,278	02/17/1998	FREDERICK S M HERZ	6099/008	8139

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EXAMINER

TUNDRA, DIMITRI

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 03/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/024,278

Applicant(s)

HERZ ET AL.

Examiner

Dimitri Tundra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 is rejected under the judicially created doctrine of double patenting over claims 9 and 53 of U. S. Patent No. 5758257 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are different definitions or descriptions of the same subject matter, varying in breadth.

a) In claim 1 of the current application, "a method for the optimization of communication between a terminal device and at least one data source" corresponds to "a method of scheduling transmission of video programs to a plurality of customers" and "scheduling the subset of video programs for transmission from a video head end to the plurality of customers for receipt on customers' televisions" of patent claim 9,

b) the claimed connection where both the source and the terminal device "are interconnected by a communication medium, which terminal service receives data via the communication medium from the at least one data source" corresponds to "scheduling the subset of video programs for transmission from a video head end to the plurality of customers for receipt on customers' televisions" of patent claim 9.

c) the claimed "terminal device transmits communications to the data source via the communication medium" corresponds to "creating a plurality of customer profiles for each of the plurality of customers of the video programs, the plurality of customer profiles being representative of the customer's changing preferences for predetermined characteristics of the video programs" of patent claim 9. It is inherent that in order to create this profile, the information about the viewing behavior should be transmitted from the terminal to the head end.

d) the claimed "apparatus comprising the steps of: producing a prioritized plurality of information segments from each of a plurality of data items which are available from the at least one data source;" of claim 1 corresponds to "creating content profiles for each video program available for transmission to the customers, the content profiles indicating the degree of content of the predetermined characteristics in each video program;" of patented claim 9;

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e) the claimed "providing data to the terminal device, identifying a selected data item by a first of the prioritized information segments of the selected data item" of claim 1 corresponds to:

"determining an agreement matrix which relates the at least one customer profile with the content profiles for certain video programs available for transmission to the customers at a particular time;

"determining from the agreement matrix a subset of the video programs having content profiles which most closely match the at least one customer profile"

Similarly, claims 2 – 3, 5, 10 – 12 correspond to the patented claim 9.

Allowance of claims 1 – 3, 5, 10 – 12 would result in a time wise extension of the monopoly previously granted for the invention defined in patent claim 9.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 1 calls for a **method** in ln. 1 and then for an **apparatus** in ln. 6;

b) the applicant uses the phrase "**the** apparatus" although he never mentions it before;

c) the "apparatus" does not "**comprise** the steps of", but rather performs the steps.

Correction required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1 – 5, 10 – 20 are rejected under 35 U.S.C. 102(e) as being unpatentable by Hendricks et al. (US 5600364).

Regarding **claim 1**, Hendricks et al. shows a method for the optimization of communication between a terminal device and at least one data source, both of which are interconnected by a communication medium (col. 3, ln. 44 – 52 show the television system, having a head end connected to the user terminals. The optimization of communication is described in the abstract, where the advertisements' delivery is optimized according to the user profile and preferences), which terminal device receives data via the communication medium from the at least one data source (inherent for CATV, where the terminal device is the TV set with the set top box, the communication medium is a coax or fiber cable, and the data source is the head end), which terminal device transmits communications to the data source via the communication medium (col. 4, ln. 1 – 10), the apparatus comprising the steps of:

producing a prioritized plurality of information segments (categories) from each of a plurality of data items (programs) which are available from the at least one data source (col. 38, ln. 54 – 61); and

providing data to the terminal device, identifying a selected data item by a **first** of the prioritized information segments (categories) of the selected data item (col. 38, ln. 57 – 61).

Regarding **claim 2**, Hendricks et al. shows the method of claim 1 wherein the step of providing data to the terminal device comprises: transmitting, in response to user input at the terminal device transmitting data to the at least one data source identifying the selected data item, data representative of a **second** (rankings for different time slots in

a given day) of the prioritized plurality of information segments of the selected data item to the terminal device (col. 38, ln. 62 – col. 39, ln. 6).

Regarding **claim 3**, Hendricks et al. shows the method of claim 2 wherein the step of providing data to the terminal device further comprises: transmitting, in response to transmission of the second prioritized information segment of the selected data item to the terminal device, data representative of at least a **third** (groups of advertising categories correlated according to the most interest to the user) of the prioritized information segments of the selected data item to the terminal device (col. 39, ln. 7 – 39).

Regarding **claim 4**, Hendricks et al. shows the method of claim 1 wherein the step of providing data to the terminal device comprises: transmitting, in response to transmission of data to the data source indicative of a user input at the terminal device which requests the entirety of the selected data item, data representative of all of the prioritized information segments of the selected data item to the terminal device (col. 39, ln. 39 – 52).

Regarding **claim 5**, Hendricks et al. discloses a basic advertisement targeting routine, in which all the program sources and advertisement sources have been sorted according to their categories based on the user profile and presents data to the users, based on the user's best interest. Thus, Hendricks's system meets the claimed limitation of



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managing the plurality of data items, which are available from the data source, to enable efficient access of the plurality of data items by a user at the terminal device (fig. 21; col. 32, ln. 26 – 33; col. 39, ln. 29 – 52).

Regarding **claim 10**, Hendricks shows the method of claim 5 wherein the step of managing the plurality of data items comprises: generating user interest profile data which is indicative of ones of the data items which are likely to be of interest to a user at the terminal device (fig. 12, item 314, col. 29, ln. 60 – col. 30, ln. 49).

Regarding **claim 11**, Hendricks et al. shows the method of claim 10, wherein the step of generating user interest profile data comprises: calculating, in response to the user accessing ones of the plurality of data items, similarity measures to identify other likely data items of interest to the user (fig. 17; col. 31, ln. 4 – 21; col. 34, ln. 39 – col. 35, ln. 3).

Regarding **claim 12**, Hendricks et al. shows the method of claim 10 wherein the step of managing the plurality of data items further comprises:

searching, in response to the user interest profile data, the prioritized information segments of all of the data items to identifying a selected data item, which most likely corresponds to the user interest profile data (fig. 17; col. 31, ln. 4 – 21; col. 34, ln. 39 – col. 35, ln. 3).

Regarding **claim 13**, Hendricks et al. shows the method of claim 1, wherein a plurality of terminal devices are concurrently connected to the communication medium, further comprising the step of:

scheduling activation of the means for providing data to the terminal device to sequentially serve the plurality of terminal devices according to a determined priority schedule (semi-automatic scheduling prioritized according to the user behavior is described in col. 8, ln. 54 – col. 9, ln. 8).

Regarding **claim 14**, Hendricks et al. shows the method of claim 13, wherein the step of scheduling comprises:

deciding what information segment is most likely usefully broadcast to each of the plurality of terminal devices (semi-automatic scheduling prioritized according to the user behavior is described in col. 8, ln. 54 – col. 9, ln. 8. Both the software and the operator participate in making a decision about the best-fitted program for each particular terminal).

Regarding **claim 15**, Hendricks et al. shows a method of providing a subscriber with program information regarding a plurality of concurrently broadcast programs (fig. 1, item 202; col. 8, ln. 54 – col. 9, ln. 8) in a data distribution system which comprises a multimedia broadcast medium which concurrently carries a plurality of programs (Cable TV system), which are made available to a plurality of subscribers, which are connected to the multimedia broadcast medium via respective terminal adapters which contain a

directory memory (fig. 8a – 8c show different program guides. These program guides inherently have to be stored at the set – top box, using memory. Also, see col. 18 – ln. 31 – 42), comprising the steps of:

storing an entirety of directory information in a memory located in the multimedia broadcast medium (fig. 12, item 318);

excerpting a subscriber specific subset of directory information from the directory information stored in the memory (fig. 8a shows “favorite channels” and “other watched channels” which are subscriber specific, which inherently means that the head end excerpted the user specific information from the total available information; further see col. 18 – ln. 31 – 42);

transmitting the excerpted directory information to the terminal adapter memory for storage therein (col. 18 – ln. 31 – 42);

enabling a subscriber at the subscriber terminal device to access the excerpted directory information stored in the terminal adapter memory (fig. 8a – 8c, where the word “access” is interpreted by the examiner as “select for viewing”).

Regarding **claim 16**, Hendricks et al. shows the method of claim 15, wherein the step of excerpting a subscriber specific subset of directory information comprises:

generating subscriber interest profile data, which is indicative of ones of the concurrently broadcast programs (advertisements), which are likely to be of interest to a subscriber at the subscriber terminal associated with the subscriber (algorithm of fig. 18).

Regarding **claim 17**, Hendricks et al. shows the method of claim 16 wherein the step of generating subscriber interest profile data comprises:

calculating, in response to the subscriber accessing ones of the plurality of broadcast programs, similarity measures to identify other likely broadcast programs of interest to the subscriber (fig. 17; col. 31, ln. 4 – 21; col. 34, ln. 39 – col. 35, ln. 3).

Regarding **claim 18**, Hendricks et al. shows the method of claim 16 wherein the step of managing the plurality of data items further comprises: searching, in response to the user interest profile data, the prioritized information segments of all of the data items to identifying a selected data item which most likely corresponds to the user interest profile data (fig. 17; col. 31, ln. 4 – 21; col. 34, ln. 39 – col. 35, ln. 3).

Regarding **claim 19**, Hendricks et al. shows the method of claim 15 further comprising the step of:

scheduling activation of the step of transmitting the excerpted directory information to sequentially serve the plurality of subscriber terminals according to a determined priority schedule (semi-automatic scheduling prioritized according to the user behavior is described in col. 8, ln. 54 – col. 9, ln. 8).

Regarding **claim 20**, Hendricks et al. shows the method of claim 18 wherein the step of scheduling comprises:

deciding what excerpted directory information is most likely usefully broadcast to each of the plurality of subscriber terminals (semi-automatic scheduling prioritized according to the user behavior is described in col. 8, ln. 54 – col. 9, ln. 8. Both the software and the operator participate in making a decision about the best-fitted program for each particular terminal).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hendricks et al. (US 5600364)** in view of **Herz et al. (US 5835087)**.

Regarding **claim 6**, Hendricks et al. shows the method of claim 5, wherein the step of managing the plurality of data items comprises: producing data representative of each of the plurality of data items, which produced data is selected from the class of data item characterizing information which includes: data item access information (items 332 - viewer log file, 338 – account history file, both of fig. 12), data item summary (item 344 of fig. 12), data item title (item 344 of fig. 12). In addition see col. 19, ln. 15 – col. 20, ln. 34). Hendricks et al. does not show data item keywords characteristics of a program. Herz et al. shows programs characterized by keyword characteristics as a way of matching programs and documents (col. 3, ln. 55 – col. 4, ln. 4). It would have

been obvious for one of ordinary skill in the art to modify Hendricks by adding keyword characteristics to the programs in order to better identify the customer preferences.

Regarding **claim 7**, Hendricks et al. shows the method of claim 6 wherein the step of managing the plurality of data items further comprises:

transmitting, in response to user input at the terminal device transmitting data to the at least one data source, data item characterizing information (Program Guide – fig. 8a and 8b) of all of the plurality of data items to the terminal device (col. 38, ln. 57 – 61).

Regarding **claim 8**, Hendricks et al. shows the method of claim 6 wherein the step of managing the plurality of data items further comprises:

transmitting, in response to user input at the terminal device transmitting data to the at least one data source requesting identification of all of the plurality of data items which satisfy criteria input by the user, data item characterizing information (Program Guide – fig. 8a and 8b) of all of the plurality of data items which satisfy the criteria input by the user to the terminal device (col. 38, ln. 57 – 61).

Regarding claim 9, The method of claim 6 wherein the step of managing the plurality of data items further comprises: transmitting, in response to user input at the terminal device transmitting data to the at least one data source identifying selected ones of the plurality of data items, data item characterizing information of the identified

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selected ones of the plurality of data items to the terminal device (Program Guide – fig.

8a - c).

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Welsh (US 5374951) shows a CATV monitoring system, utilising telephone network as a back channel.

McMullan, Jr. (US 5251324) shows an apparatus for collecting viewing statistics.

If attempts to reach the supervisor, Andrew Faile, can be reached on (703) 306-4333. The supervisor, Andrew Faile, can be reached on (703) 308-5399. for the organization where this application or proceeding is assigned is (703) 308-5399. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
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DT:dt  
February 05, 2002



**Contact Fax Information**

**Any response to this action should be mailed to:**

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**or Faxed to:**

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Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimitri Tundra whose telephone number is (703) 605-4246. The examiner can normally be reached Monday – Thursday, 8:30AM – 6:00PM and every even week of the month on Friday 8:30 AM – 5:00PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



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DT:dt  
February 05, 2002